

GILA RIVER BASIN

09512500 AGUA FRIA RIVER NEAR MAYER, AZ

LOCATION--Lat 34°18'55", long 112°03'48", in NW_{1/4}SE_{1/4} sec. 20, T.11 N., R.3 E., Yavapai County, Hydrologic Unit 15070102, on left bank at Sycamore damsite, 700 ft downstream from Big Bug Creek and 12 mi southeast of Mayer.

DRAINAGE AREA--585 mi².

PERIOD OF RECORD--Jan. 1940 to current year.

REVISED RECORDS--WDR AZ-88-1: 1987. WDR AZ-89-1: Drainage area.

GAGE--Water-stage recorder. Datum of gage is 3,434 ft above sea level.

REMARKS--Records fair, except for estimated daily discharges, which are poor. Diversions above station for mining and irrigation of about 600 acres.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 33,100 ft³/s Feb. 19, 1980, from rating curve extended above 3,400 ft³/s on basis of slope-area measurement of peak flow, gage height, 15.76 ft, from mean of surge, inside highwater mark 16.03 ft, floodmark 18.97 ft; negligible flow at times during the summer months in most previous years when entire flow was diverted to Perry Canal above station and flow past gage was seepage only.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 2,300 ft³/s from rating curve extended as explained above, and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 14	2200	*3,060	*6.31

Minimum daily discharge, 0.31 ft³/s Aug. 10, 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.65	0.83	1.0	1.9	2.6	150	4.3	2.2	e0.90	e0.40	e0.45	0.89
2	1.1	0.84	1.0	1.9	2.7	62	4.1	2.2	e0.80	e0.40	e0.40	0.88
3	0.73	0.84	1.0	2.0	2.6	52	3.8	2.1	e0.70	0.39	e0.40	2.0
4	0.70	0.84	1.1	2.0	2.7	33	3.5	2.1	0.72	0.37	e0.35	0.94
5	0.71	0.85	1.1	1.9	2.7	26	3.4	2.1	0.74	0.36	e0.35	0.87
6	0.69	0.83	1.1	1.9	2.7	26	3.4	2.1	e0.70	0.35	e0.35	52
7	0.70	0.84	1.2	1.9	2.7	42	3.2	2.1	e0.70	0.35	0.36	8.8
8	0.70	0.84	1.2	2.3	2.7	45	3.2	2.1	e0.65	0.34	0.33	3.3
9	0.67	0.88	1.2	2.5	2.8	26	3.1	2.0	e0.60	0.34	0.34	2.8
10	0.68	0.86	1.2	2.3	2.8	19	3.1	2.0	e0.60	0.33	0.31	6.0
11	0.68	0.81	1.2	2.3	2.8	16	3.1	e2.0	e0.60	0.34	0.31	1.7
12	0.72	0.81	1.2	2.2	3.0	15	2.9	e2.0	e0.60	0.34	0.34	1.3
13	0.71	0.82	1.2	2.3	56	14	2.9	e2.0	e0.60	0.35	0.39	1.2
14	0.72	0.84	1.3	2.4	146	13	2.9	e2.0	e0.55	0.35	233	1.0
15	0.72	0.86	1.3	2.4	18	12	3.0	e2.0	e0.55	0.37	e125	0.94
16	0.74	0.87	1.3	2.4	8.8	12	3.0	e1.9	e0.50	0.35	e7.0	0.93
17	0.79	0.85	1.4	2.5	6.7	176	2.8	e1.9	e0.50	0.35	e6.5	0.91
18	0.81	0.84	1.4	2.4	5.5	144	2.8	e1.8	e0.50	0.39	e7.0	0.85
19	0.78	0.87	1.4	2.4	4.6	57	2.8	e1.7	e0.50	0.43	e10	0.85
20	0.76	0.86	1.4	2.5	4.2	30	2.7	e1.7	e0.50	0.43	e5.0	0.84
21	0.75	0.87	1.4	2.5	4.0	18	2.6	e1.6	e0.45	0.46	e5.0	0.79
22	0.77	0.90	1.5	2.6	3.9	14	2.6	e1.5	e0.45	0.47	e11	0.75
23	0.84	0.90	1.6	2.6	3.8	11	2.6	e1.4	e0.45	e0.45	e4.0	0.72
24	0.80	0.88	1.6	2.6	3.7	9.9	2.5	e1.4	e0.45	e0.35	e6.0	0.71
25	0.78	0.90	1.7	2.6	23	8.6	2.5	e1.3	e0.45	e0.35	e16	0.72
26	0.87	0.93	1.7	2.5	119	7.5	2.4	e1.3	e0.40	0.35	e4.5	0.67
27	0.94	0.92	1.7	2.6	165	6.6	2.4	e1.2	e0.40	e0.35	1.1	0.63
28	0.84	0.93	1.7	2.6	188	5.8	2.3	e1.1	e0.40	e0.45	26	0.60
29	0.83	0.97	1.8	2.6	---	5.1	2.2	e1.0	e0.40	e0.40	e1.4	0.55
30	0.83	1.1	1.7	2.7	---	4.8	2.2	e1.0	e0.40	e1.9	0.97	0.50
31	0.83	---	1.8	2.6	---	4.8	---	e1.0	---	e0.50	0.91	---
TOTAL	23.84	26.18	42.4	72.9	793.0	1066.1	88.3	53.8	16.76	13.36	475.06	95.64
MEAN	0.77	0.87	1.37	2.35	28.3	34.4	2.94	1.74	0.56	0.43	15.3	3.19
MAX	1.1	1.1	1.8	2.7	188	176	4.3	2.2	0.90	1.9	233	52
MIN	0.65	0.81	1.0	1.9	2.6	4.8	2.2	1.0	0.40	0.33	0.31	0.50
AC-FT	47	52	84	145	1570	2110	175	107	33	26	942	190
CFSM	0.00	0.00	0.00	0.00	0.05	0.06	0.01	0.00	0.00	0.00	0.03	0.01
IN.	0.00	0.00	0.00	0.00	0.05	0.07	0.01	0.00	0.00	0.00	0.03	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

MEAN	9.06	9.08	27.9	31.2	60.4	48.8	19.3	3.29	2.54	10.6	31.1	17.4
MAX	223	146	453	718	1179	389	314	19.6	29.7	48.2	244	187
(WY)	1973	1988	1966	1993	1980	1991	1941	1941	1940	1955	1951	1970
MIN	0.14	0.10	0.077	0.071	0.021	0.006	0.000	0.032	0.007	0.15	0.31	0.16
(WY)	1951	1950	1951	1951	1951	1951	1951	1951	1965	1960	1962	2001

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1940 - 2003

ANNUAL TOTAL	3252.26	2767.34										
ANNUAL MEAN	8.91	7.58										
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	826	Sep 8	233	Aug 14								
LOWEST DAILY MEAN	0.23	Jul 22	0.31	Aug 10								
ANNUAL SEVEN-DAY MINIMUM	0.28	Jul 18	0.33	Aug 6								
ANNUAL RUNOFF (AC-FT)	6450		5490									
ANNUAL RUNOFF (CFSM)	0.015		0.013									
ANNUAL RUNOFF (INCHES)	0.21		0.18									
10 PERCENT EXCEEDS	2.5		10									
50 PERCENT EXCEEDS	0.92		1.3									
90 PERCENT EXCEEDS	0.34		0.40									

e Estimated